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|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 09/936,823 | PENTTILA ET AL. | |
| | Examiner | Art Unit | |
| | Samuel W. Liu | 1653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/13/05 and 5/6/04.
2. ☒ The allowed claim(s) is/are 1, 3-14 and 18-26.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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DETAILED ACTION

The following Office action is in replacement of the "Notice of allowability" mailed 7/1/05 which has been withdrawn currently.

This Office action is in response to the applicants' amendments filed 5/13/05, which amends claims 1, 3-5, 10, 19 and 24, cancels claim 27, and adds claim 28. The amendment indicated above has been entered. The pending claims 1, 3-26 and 28 are examined in this Office action. Note that claim 2 is canceled by the amendment filed 5/6/04.

EXAMINER'S AMENDMENT

An Examiner's Amendment to the record appears below. Should the change and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than payment of the Issue Fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Graig McRobbie on June 2, 2005. Applicants agree the Examiner proposed amendment to claims 1 and 6, and agree to cancel claims 15-17 and 28 without prejudice (see below).

Amendments to the claim:

The pending claims 1, 6, 15-17 and 28 have been amended or cancelled as follows. Please replace the previous claims with the claim shown below.

Amendment to the claims:

The pending claims 1 and 3-5 have been amended as follows. Please replace the previous claim with the claims shown below.

Claim 1 (*Amended*): A process for partitioning of proteins or cells in aqueous two-phase systems (ATPS), comprising the steps of
a) ~~in order to obtain a fusion protein or cell, combining~~ fusing a protein or a cell surface protein of a cell of interest to ~~with~~ a targeting protein selected from the group consisting of hydrophobins and hydrophobin-like proteins having the ability to partition in ATPS

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and to carry said protein or cell of interest into one phase of said ATPS, and
b) subjecting said fusion protein or cell ~~combined with the targeting protein to an ATPS-~~
mediated protein separation.

Claim 6 (*Amended*): The process according to claim 1 for partitioning said cells in ATPS, wherein the partitioning is mediated by the targeting protein which is fused with the cell surface protein of said cells in step a) ~~the combination of the cells of interest to the targeting protein comprise bringing said targeting protein onto the surface of said cells.~~

Delete claims 15-17 and 28.

Amendments to the specification:

Replace the continuation data on page 1 at line 1.

This application is a 371 of PCT/FI00/00249 filed 03/24/2000, which claims foreign priority benefit of the filing date under 35 U.S.C. 119 of Finland patent applications: Finland 19991782 filed 8/20/1999 and Finland 990667 filed 3/25/1999.

Objection to Specification/Drawings

The brief description for Figure 14 (page 14, lines 22-23) is object to because the description does not expressly describe the amino acid sequence (Ala Ser Gly Ala Ser Arg Ala Ser Gly) or/and nucleotide sequence (GCC TCA GGA GCC TCT AGA GCT TCA GGA) set forth in Figure 14. See also the drawing descriptions for (i) Figure 20 (page 15, line 5), (ii) Figure 21 (page 15, line 7), and Figure 22 (page 15, line 9).

The current disclosure does not comply with one or more parts of 37 CFR 1.821-1.825 since said sequence requires sequence identifier (SEQ ID NO: _); see the amino acid sequences "Gly Ser Ser Ser Gly Thr Ala Pro Gly Gly" (page 31, line 19; and page 32, line 4); "PGASTSTGMGPGG" (page 38 lines 3 and 30); "Pro Gly Ala Ser Thr Ser Thr Gly Met Gly Pro Gly Gly" (page 39, line 17); and "ANAFCEPGLLYTNPLCCDLL" (page 48, line 18). Correction is required. A new paper copy and a computer readable from (CRF) are required as is the statement regarding no new matter and that the paper and CRF copies are identical.

Conclusion: claims 1, 3-14 and 18-26 are allowed.

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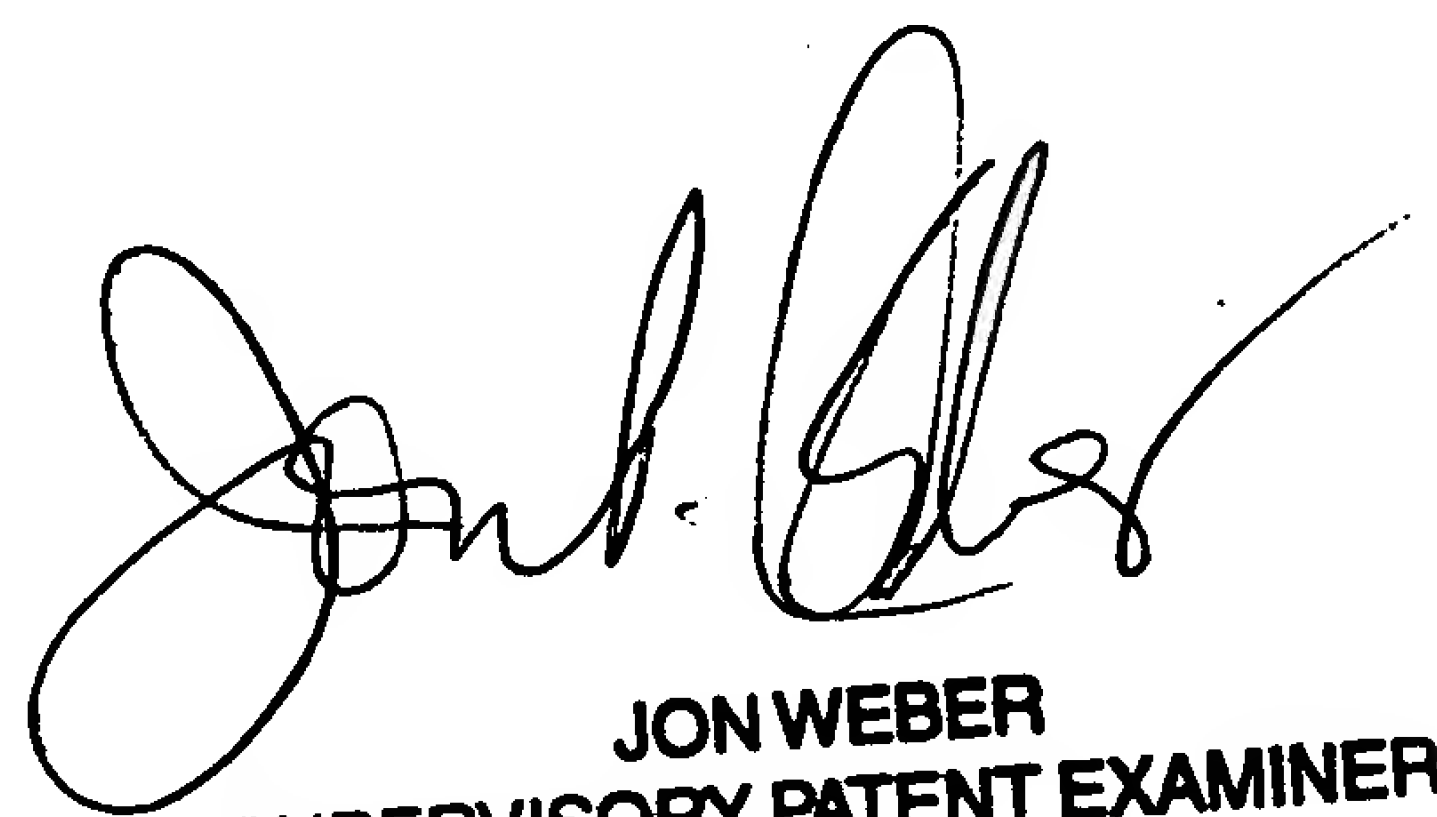
The following is an **Examiner's Statement of Reasons for Allowance**: claims 6-9 previously drawn to non-elected invention which is directed to the method of partitioning of a substance in ATPS comprising bringing the target protein onto cell surface, and claim 24 is directed to a method of separating hydrophobins in ATPS which is non-elected, are now subject to being rejoined with the elected invention of claims 1, 3-5, 10-14, 18-23 and 25-26. Thus, claims 1, 3-14 and 18-26 are allowable over the art of record.

Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Wei Liu, Ph.D. whose telephone number is (571) 272-0949. The Examiner can normally be reached daily except alternate Fridays from 8:30 A.M. to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jon Weber, can be reached at (571) 272-0925. The official fax number for Technology Center 1600 is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.



Samuel W. Liu, Ph.D.
Art Unit 1653, Examiner
August 27, 2005



JON WEBER
SUPERVISORY PATENT EXAMINER